

POPULATION AND FAMILY PLANNING IN TAIWAN



Taiwan Provincial Institute of Family Planning
Taichung, Taiwan, Republic of China

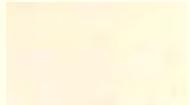
Mr. and Mrs. McNamara call on Governor T. C. Chen of the Taiwan Provincial Government. From right to left, Mr. K. T. Li, Minister of Finance, Governor Chen, Mr. McNamara, Mrs. Chen, Mrs. McNamara, and Mr. K. H. Yu, President of the Bank of China.



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Dr. T. C. Hsu, Commissioner of Health, greets
Mr. and Mrs. McNamara at Tropicana airport.

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This is the report presented to Mr. Robert S. McNamara, President of the World Bank Group, by Dr. T. C. Hsu, Commissioner of Health, Taiwan Provincial Government, on the occasion of Mr. McNamara's visit to the Taiwan Provincial Institute of Family Planning on May 17, 1970.

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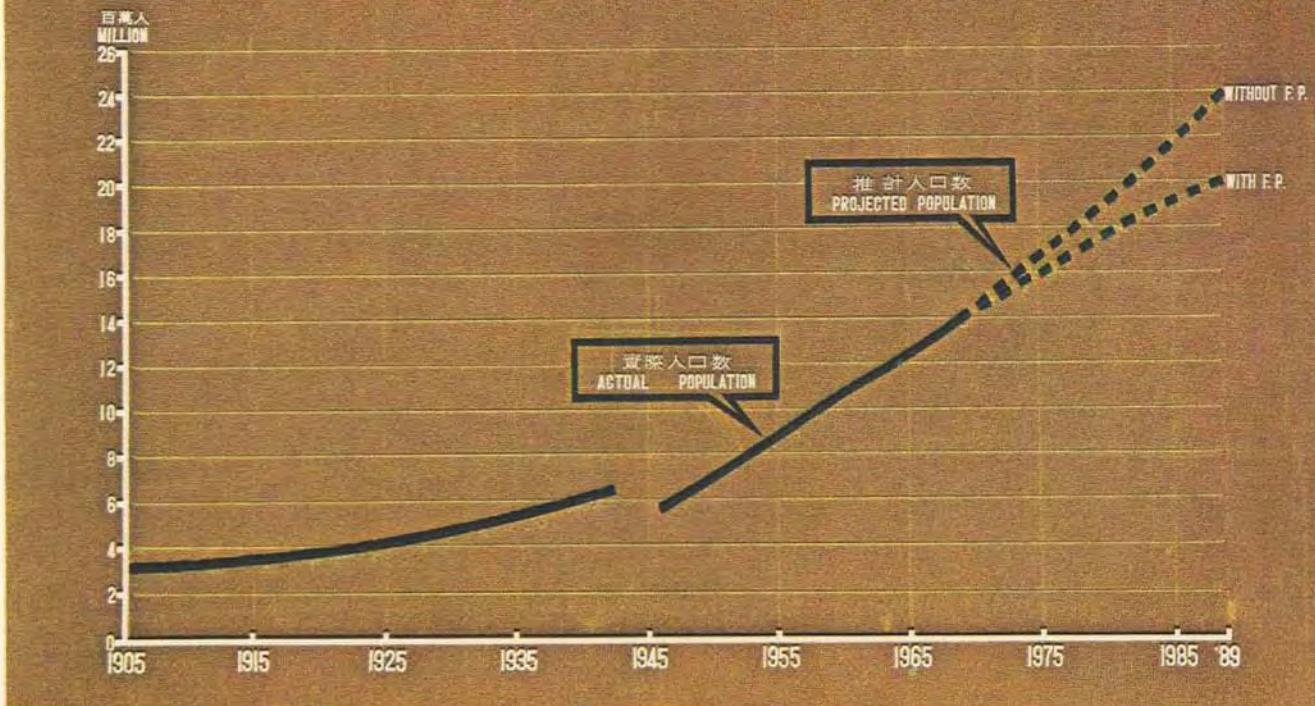
INTRODUCTION

This is the story of the population problem and family planning in Taiwan. The 19 charts published here illustrate the population growth, its economic impact, the family planning program, its results, and the future problems.

The goal of the program is to lower the annual population growth rate from 3 per cent in 1963 to 2 per cent by 1973. By the end of 1969 the rate was reduced to 2.3 per cent.

人口之成長

POPULATION GROWTH



PART I. THE POPULATION

Chart 1. Population Growth

The population in 1905 was about 3 million.

It doubled to 6 million by 1941—in 36 years.

It doubled again to 12 million by 1964—in only 18 years.

It is estimated that, with an active family planning program, it will rise only to 20 million by 1989—20 years from now.

Without a program it will rise to 24 million.

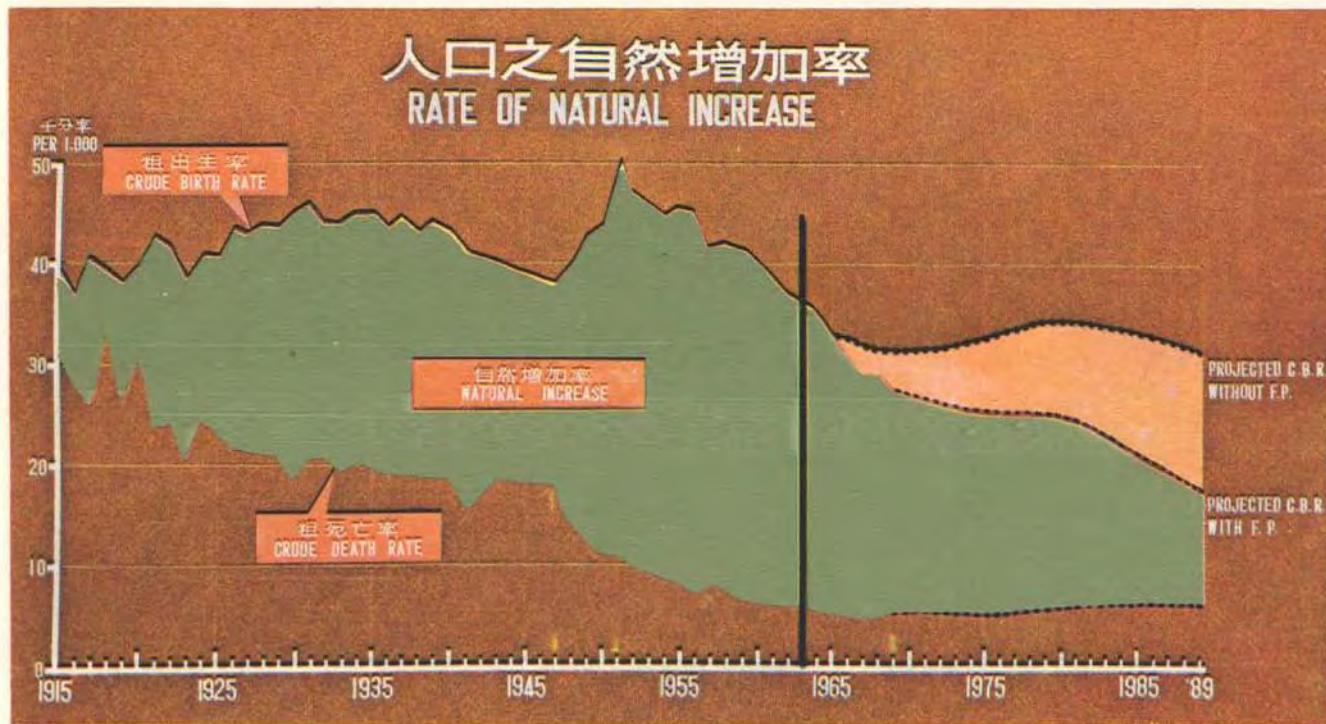


Chart 2. Rate of Natural Increase

The rapid population increase has been due mainly to the drop in the death rate, which fell from 18 per thousand in 1947 to only 5 per thousand in 1969. This very low rate—about half that of the U.S.A.—is, of course, due to the very many children in the present population.

The birth rate also is dropping: from 50 per thousand in 1951 to 28 in 1969.

You will note, though, that the birth rate will not drop and may even rise in the coming years unless an active family planning program is carried out.

將來人口之推測

ZERO GROWTH RATE POPULATION PROJECTION

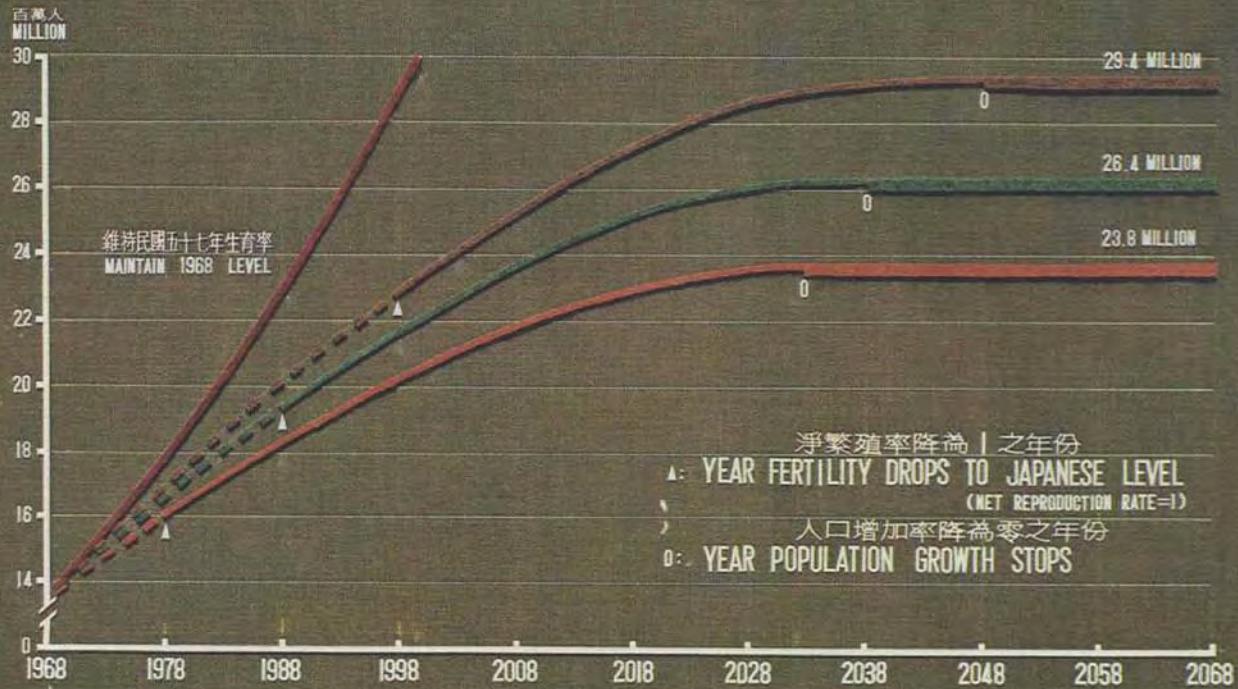
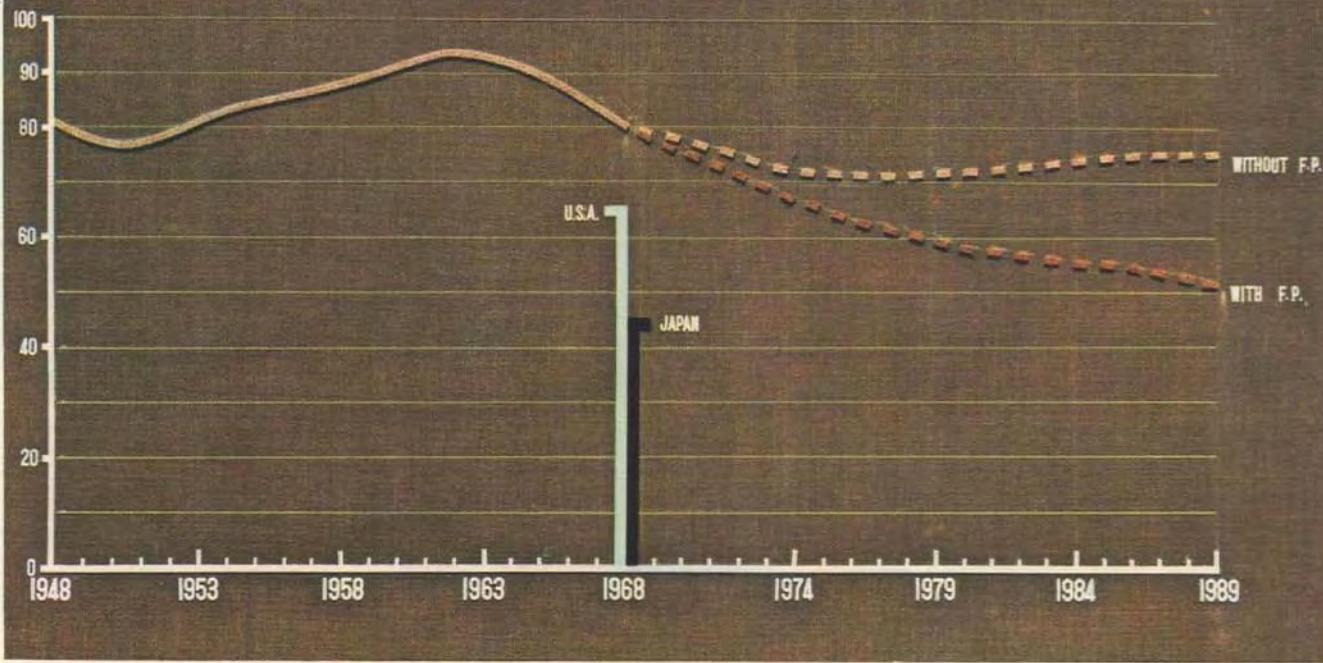


Chart 3. Zero Growth Rate Population Projection

This chart shows that, if Taiwan's fertility level remains the same as in 1968, the population will soar (as shown by the red line) to 23 million in 1988 and to 30 million within 30 years. Even if, by good fortune and intensive effort, Taiwan was to reach Japan's present vital rates (essentially the 2-child family) by 1978—which seems unlikely—then the population still would continue growing for at least 63 years and not level off until the year 2033, at about 24 million. In short, zero per cent growth rate is not likely to come before 63 years at the minimum.

依賴人口比例 DEPENDENCY BURDEN



PART II. ECONOMIC IMPACT

Chart 4. Dependency Burden

A major drawback to economic development is too many children and retired people. In 1968, every 100 people in economically productive ages between 15 to 64 had to support 81 dependent persons (under 15 or over 64). The U.S.A., on the other hand, had to support only 64; and Japan only 45.

With an effective family planning program, Taiwan can almost reach Japan's lower figure by 1989.

二十至二十二歲男性預測人口數
POPULATION PROJECTION FOR MALES AGE 20-22

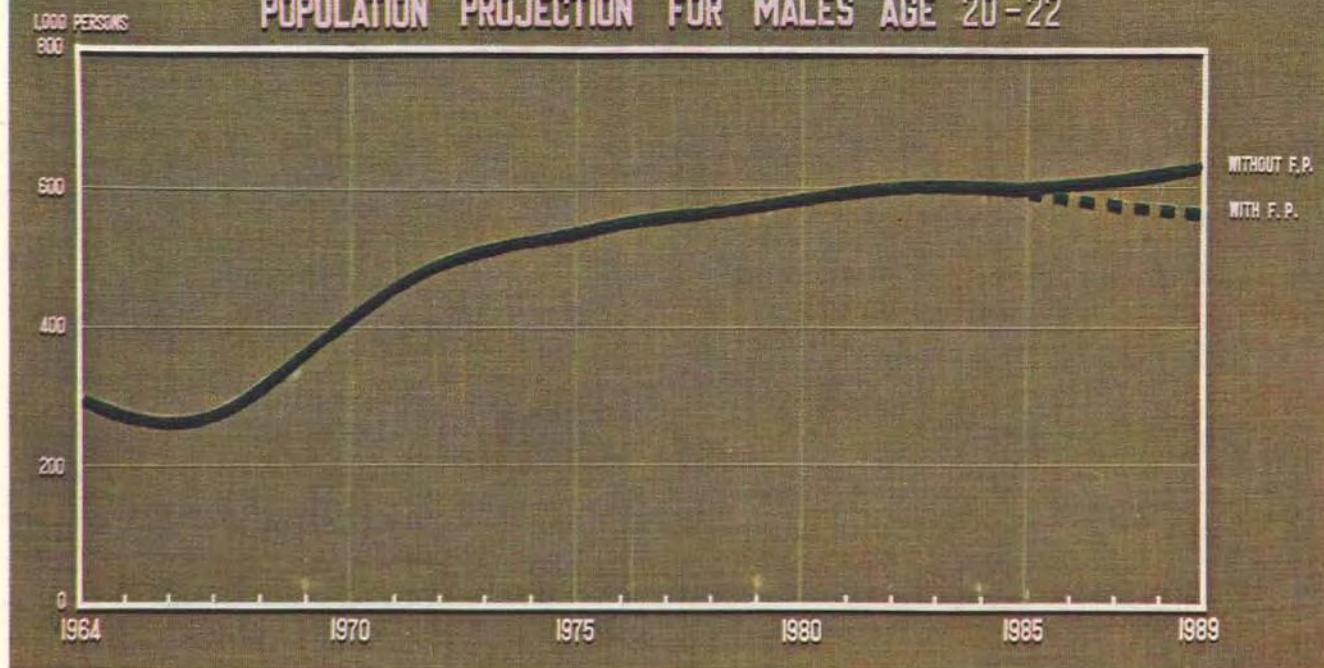


Chart 5. Population Projection for Males Age 20-22

As a result of high fertility in the past, the number of males 20-22 years of age will continue to grow from about 300,000 in 1969 to 600,000 in 1979. Our present active family planning program will have no effect on this population until after 1984, and the difference still will be small. In other words, the number of recruits for military service will have changed hardly at all.

稻米之生產與消費 RICE PRODUCTION AND FUTURE CONSUMPTION

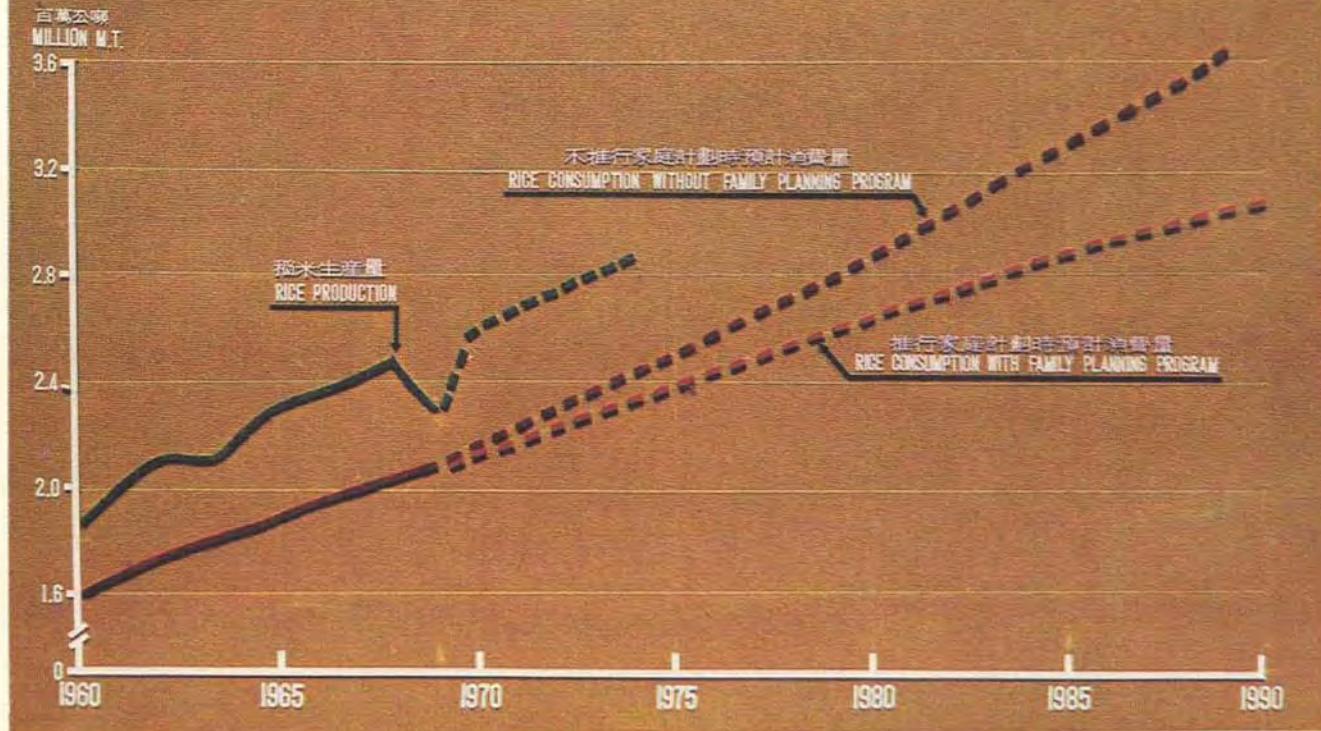


Chart 6. Rice Production and Future Consumption

The production of rice, thus far, has kept pace with the rate of population growth. Now the number of people per acre of arable land is second only to Japan. The question is how long the rate of growth of rice production can be maintained. The strong typhoons in 1969 seriously affected 1969's rice production. Even if production continues to expand at the 1968 rate, Taiwan may have to buy rice from abroad by 1985. And, even with an effective family planning program, there will be little or no surplus rice for export.

(1) 學齡人口數之推計
SCHOOL AGE POPULATION PROJECTIONS

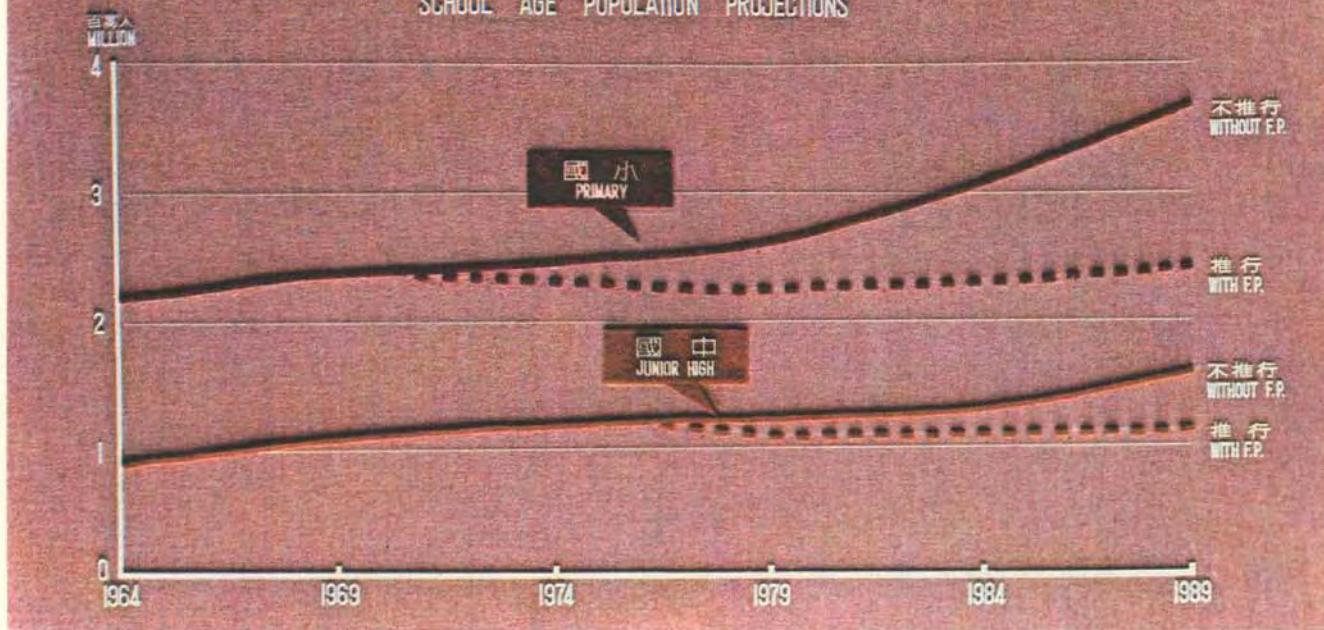


Chart 7. School Age Population Projection

Taiwan's compulsory education is now for nine years. In twenty years, with an active family planning program, there will be 1.5 million fewer school children.

(2) 推行家庭計劃政府可能節省之教育經費
ESTIMATED GOVERNMENT SAVINGS ON EDUCATION

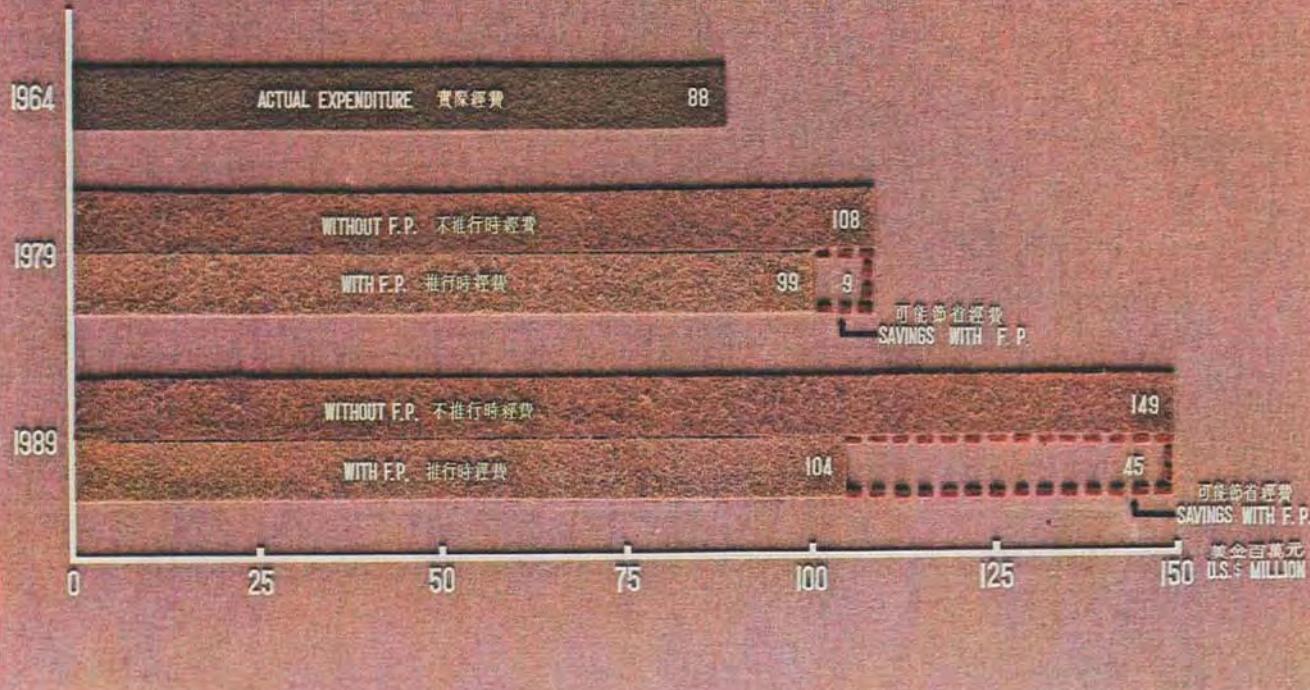
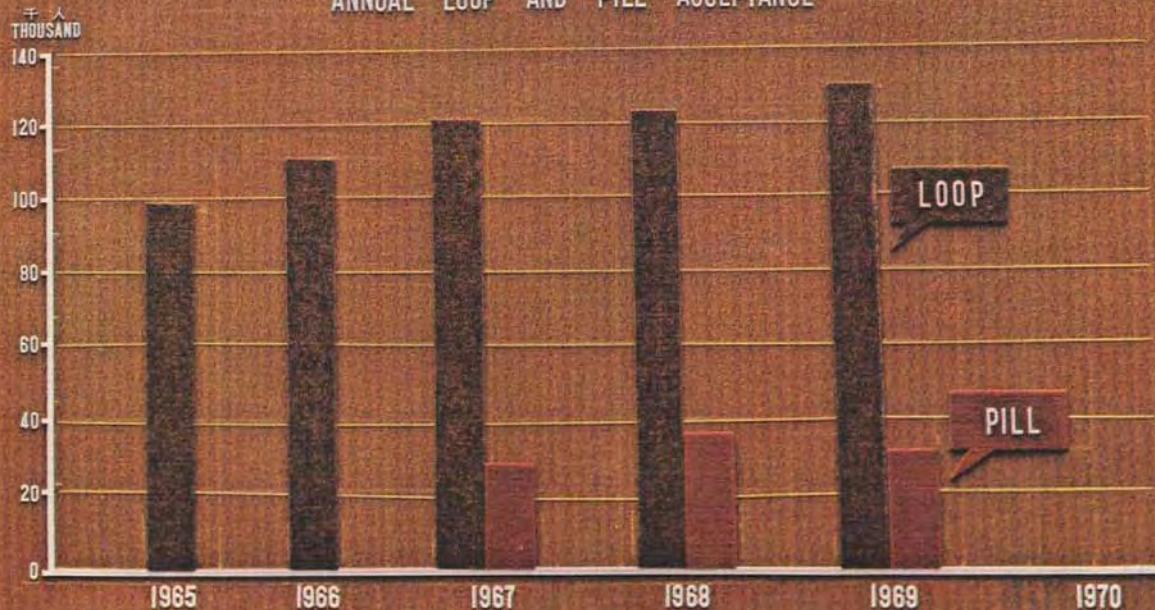


Chart 8. Estimated Savings on Education

In the year 1989, these fewer children will mean a great saving to the educational budget, which will be only 60% of what it would be without a family planning program. US\$45 million could be saved in that year alone.

民衆對家庭計劃之需要情形 RESULTS IN ACCEPTANCES

每年樂普及口服避孕藥之接受數
ANNUAL LOOP AND PILL ACCEPTANCE



PART III. THE FAMILY PLANNING PROGRAM

Chart 9. Result in Acceptances

The program began in 1964. As was mentioned, its goal was to reduce the rate of natural increase of the population from 3 per cent in 1963 to less than 2 per cent by 1973. The first 5-year target was set at 600,000 loops.

As you can see, the total annual acceptors have tended to rise from less than 100,000 loops in 1965 to 130,000 in 1969 plus 30,000 pill acceptors.

累積接受數與接受率

CUMULATIVE ACCEPTANCE AND ACCEPTANCE RATE

	樂 普 LOOP	口服避孕藥 PILL
累 積 接 受 數 CUM. ACCEPTANCE MARCH 1970	664.507	102.756
累 積 接 受 率 CUM. ACCEPTANCE RATE WIVES 20-44	34.5% (1ST INSERTION)	6.1%

Chart 10. Cumulative Acceptance and Acceptance Rates

By the end of 5 years, the target had been exceeded, but 600,000 loops were not enough.

As of the end of March 1970, there had been 665,000 loop insertions and 102,000 pill acceptors.

These corresponded to about 35% of the wives 20-44 for the loop and 6% for the pill.

家庭計劃成本 COMPARATIVE PROGRAM COSTS

維持一對夫婦一年不生育之成本
COST PER COUPLE-YEAR OF PROTECTION



每人平均分擔經費
COST PER PERSON



Chart 11. Comparative Program Costs

The program's total expenditure in 1969 was about US\$700,000. This was equivalent to about 5¢ per person of the population, which is lower than for almost any other similar program.

Taiwan's cost per couple year of protection is only US\$2.21 compared to higher costs for most other national programs.

In short, Taiwan puts less money in its program but tends to get more for it! These figures come from a special study of cost-effectiveness done for AID.

台灣家庭計劃之經費開支

TOTAL SPENDING (1964—1968)

INDIRECT

RESEARCH, FELLOWSHIP & OTHER

ADMINISTRATION

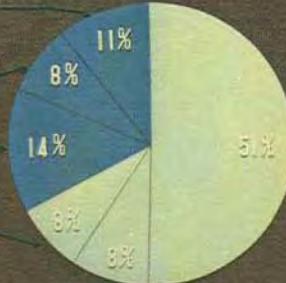
ANALYSIS & EVALUATION

SUPPLY & OTHER

PUBLICITY, EDUCATION & TRAINING

DIRECT

SALARIES & ALLOWANCES



台灣省家庭計劃經費佔省衛生經費與省政府總經費之百分比
PROVINCIAL FAMILY PLANNING BUDGET AS % OF TOTAL HEALTH
AND TOTAL PROVINCIAL GOVT. BUDGETS

FISCAL YEAR	% OF HEALTH BUDGET	% OF GOVT. BUDGET
1967	0.70	0.03
1968	2.56	0.10
1969	5.09	0.18
1970	6.24	0.22

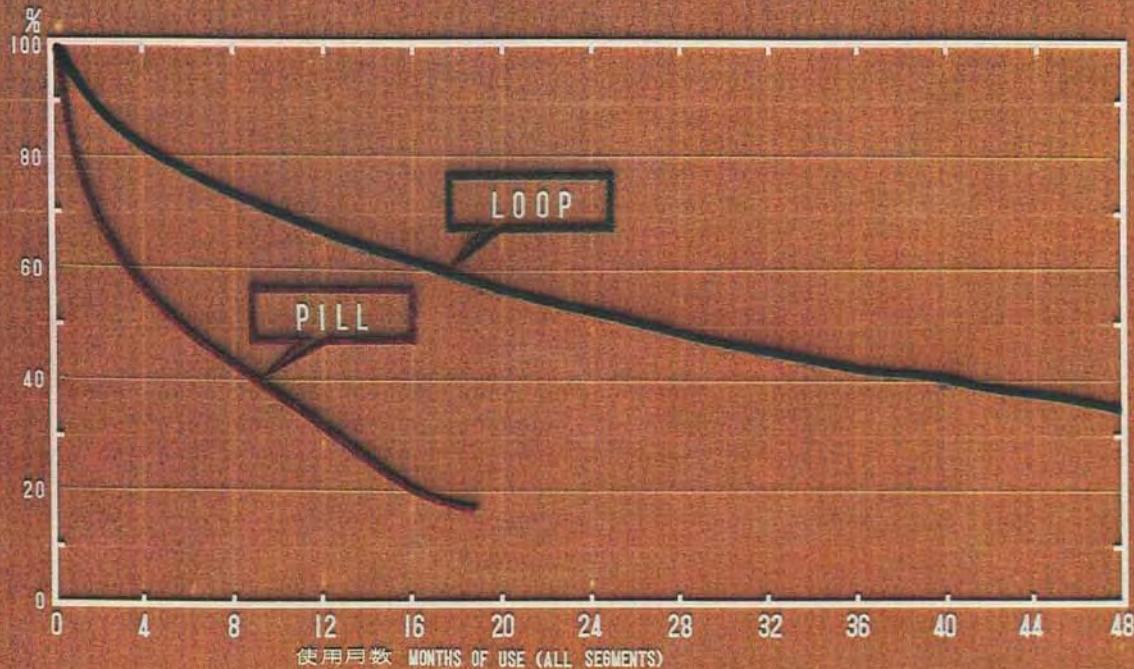
Chart 12. Total Spending

This pie chart shows how our budget from 1964 through 1968 was spent.

Note that 67 per cent is attributed to direct costs, mostly salaries for home visitors and public education. The analysis and evaluation slice of the pie is high (14%) partly because Taiwan carries out many experimental types of studies—of interest also to other countries.

Not illustrated but worth noting is that the Provincial Government's payments to the overall budget have risen from virtually nothing in cash during 1964-67 to 41% of the \$850,000 budget for 1970. Of course, the Provincial Government share for family planning is still only one fifth of one per cent of its total annual budget. Family planning accounts for 6 per cent of the total health budget.

樂普與口服避孕藥之繼續使用情形 CONTINUED USE OF LOOP AND PILL



PART IV. THE RESULTS

Chart 13. Continued Use of Loop and Pill

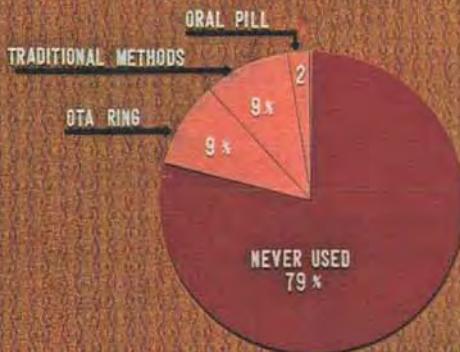
An important question, of course, is how long the contraceptive acceptor will continue to use the contraceptive. Of 100 women who began using the loop, 67 were still using the loop at the end of a year, 51 after two years, and 36 after 4 years.

What this means is that, although about 30% of all wives 20-44 have tried the loop, only about half are still using it.

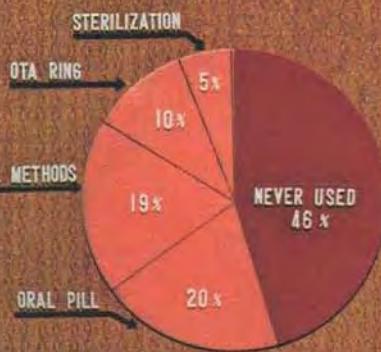
The continuation rate with the pill, though, is worse. Of 100 women who began use, only 49 were continuing after six months and only 32 after a year. This means that pill use at the end of a year is about the same as loop use after 4 years. That's why we stress the loop!

樂普裝置以前與停用以後之避孕情形 CONTRACEPTIVE PRACTICE

BEFORE LOOP ACCEPTANCE



AFTER LOOP TERMINATION



樂普裝置對生育之影響
LOOP ACCEPTANCE LOWERS FERTILITY



Chart 14. Effects of Loop Program

Even with a lower continuation rate than expected, the women who accept the loop have a considerably lower fertility rate after acceptance than before.

Notice that almost 80 per cent of women who tried the loop had never used any other contraceptive before.

Of those who discontinued loop use, only about 46 per cent had used no other contraceptives after the loop. More than half took up other contraceptives.

Most important, the number of babies born per 1,000 women after loop acceptance (brown bar) was only about one-fifth as high as before (green bar).

已婚婦女對家庭計劃之態度與實行之變遷

民國五十四年與五十八年之對照

CHANGE IN ATTITUDE AND PRACTICE

1965 V. 1969

EXPERIENCED AT LEAST
ONE INDUCED ABORTION

10
14

1965

1969

CURRENTLY PREGNANT

12
10

CURRENT USERS OF
CONTRACEPTIVE METHODS

23
44

EVER USED CONTRACEPTION

27
55

HAVING MORE THAN THREE
LIVING CHILDREN

52
49

APPROVAL OF FAMILY
PLANNING

77
94

0 20 40 60 80 100 %

Chart 15. Change in Attitude and Practice

A good idea of the overall progress can be seen in the results of the Island-wide knowledge, attitude, and practice survey taken every two years since 1965.

The per cent of wives of childbearing age practicing contraception now has almost doubled from 23 in 1965 to 1969's 44 per cent.

Approval of family planning also has risen from 1965's 77 per cent to 1969's 94 per cent.

實際使用方法

民國五十四年與五十八年對照

ACTUAL METHODS USED 1965 V 1969

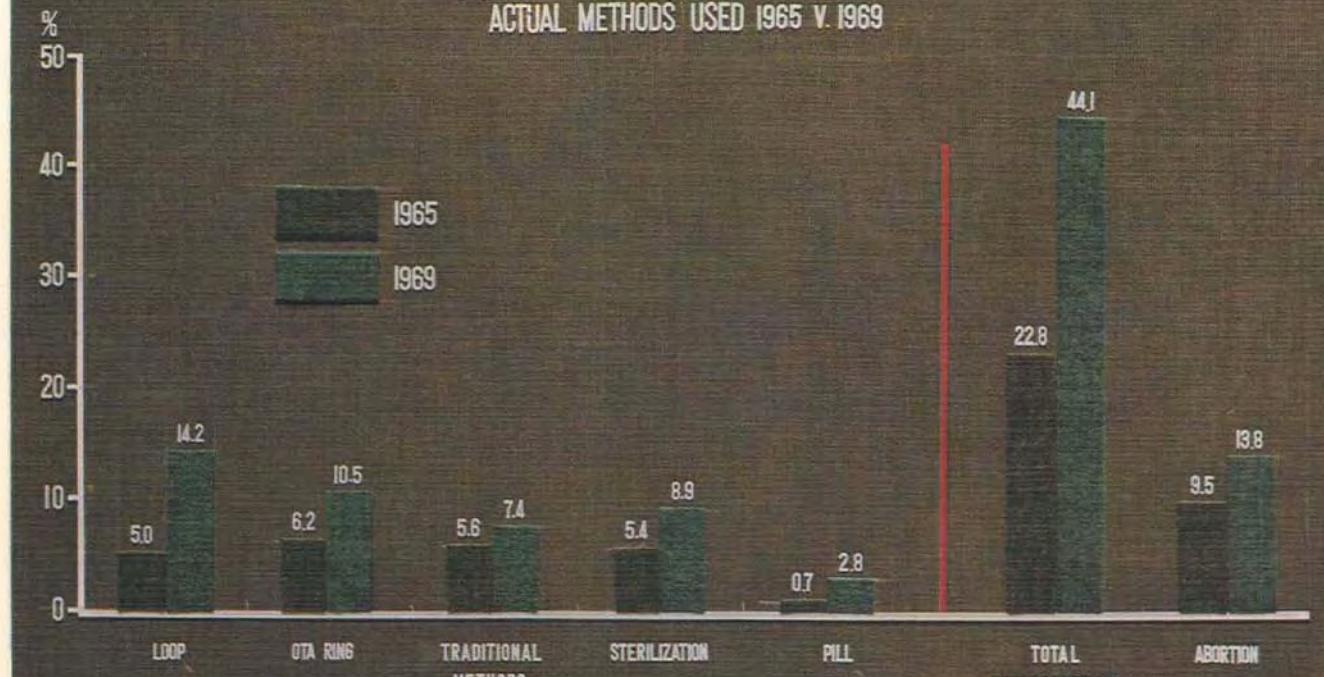
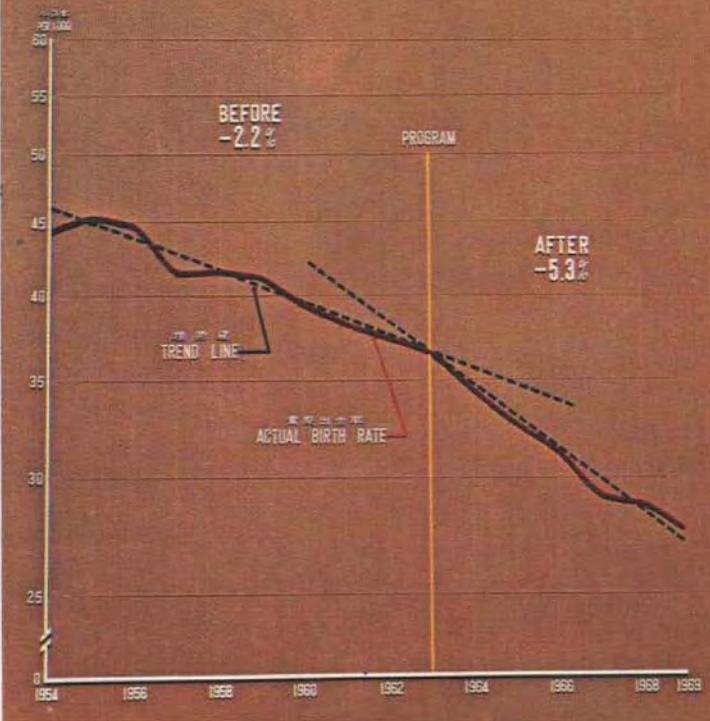


Chart 16. Change in Actual Contraceptive Methods Used

This chart shows the actual contraceptive methods being used in 1965 and 1969. Program methods (loop and pill) account for about 40 per cent of all current practice. The program, of course, also can take some credit for other practice since (1) as shown earlier, about half those who stopped using the loop took up other methods; and (2) some people are likely to try other methods after receiving information from program sources.

家庭計劃推行前後之生育力降低情形
ANNUAL FERTILITY DECLINE BEFORE AND AFTER PROGRAM



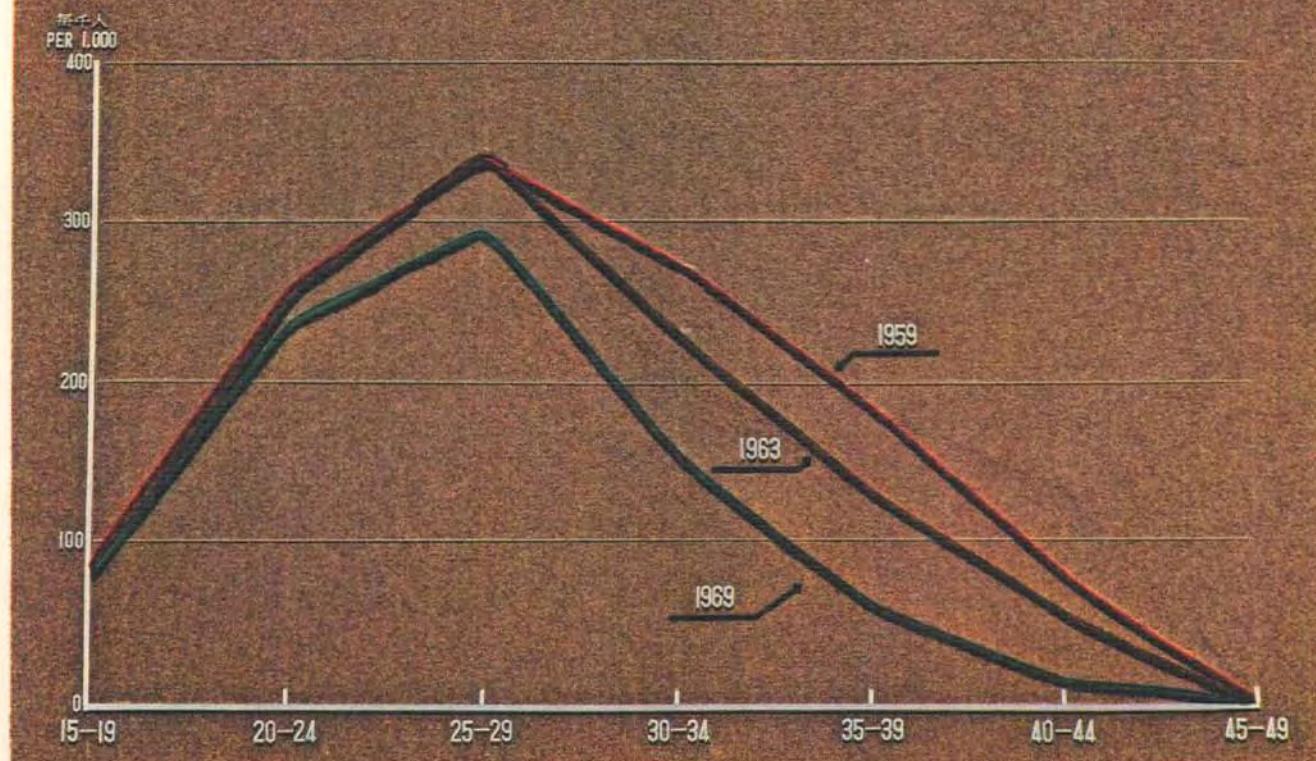
PART V. EFFECT ON FERTILITY

Chart 17. Annual Fertility Decline Before and After the Program

A few skeptics say that the fertility had been dropping since 1954 anyway! They suggest that our family planning program did not help much.

This chart shows that, before the family planning program began, the annual birth rate decline was only 2.2%. After the program got going, the annual decline went more than twice as fast—to 5.3%.

年齡別生育率之改變 CHANGE IN AGE-SPECIFIC FERTILITY



PART VI. FUTURE PROBLEMS

Chart 18. Change in Age-Specific Fertility

Thus far, the program has been moving well although Taiwan is not putting as much effort in as its neighbor, Korea.

The problem, though, is that the number of younger women is increasing and they are the ones who have the babies. From 1968 to 1973 the women aged 20-24 will increase in number by 60 per cent due to the early 1950's baby boom.

As this chart shows, the drop in fertility so far is mostly among women 30 and older. The younger ages 20-29 still have too high fertility.

理想與現有子女數

三十至三十九歲婦女

IDEAL AND ACTUAL NUMBER OF CHILDREN
(FOR WOMEN AGE 30 - 39)

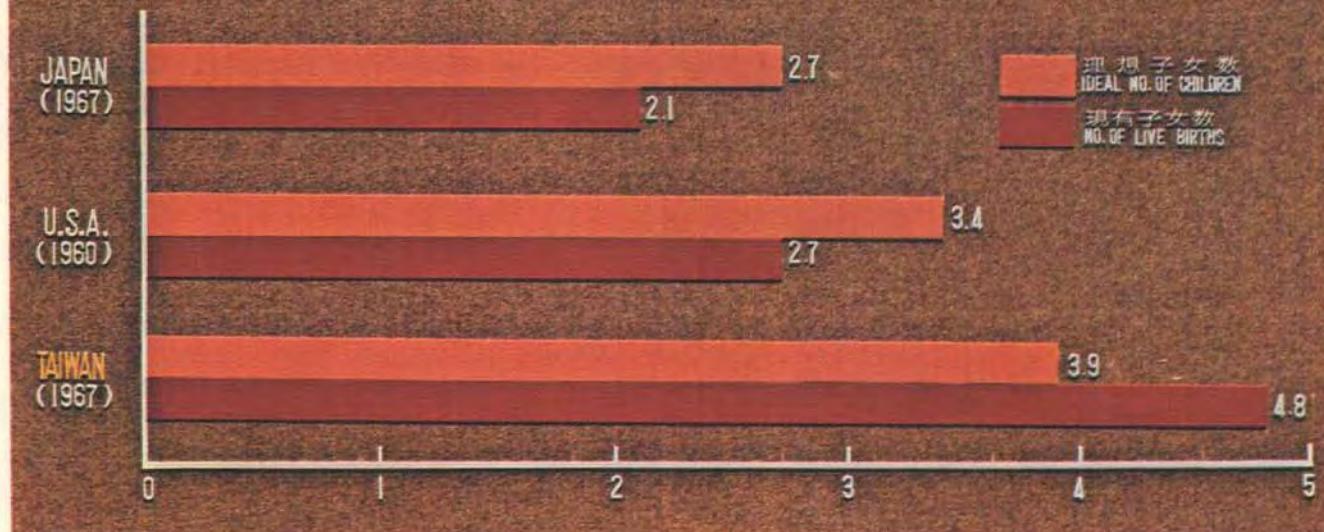
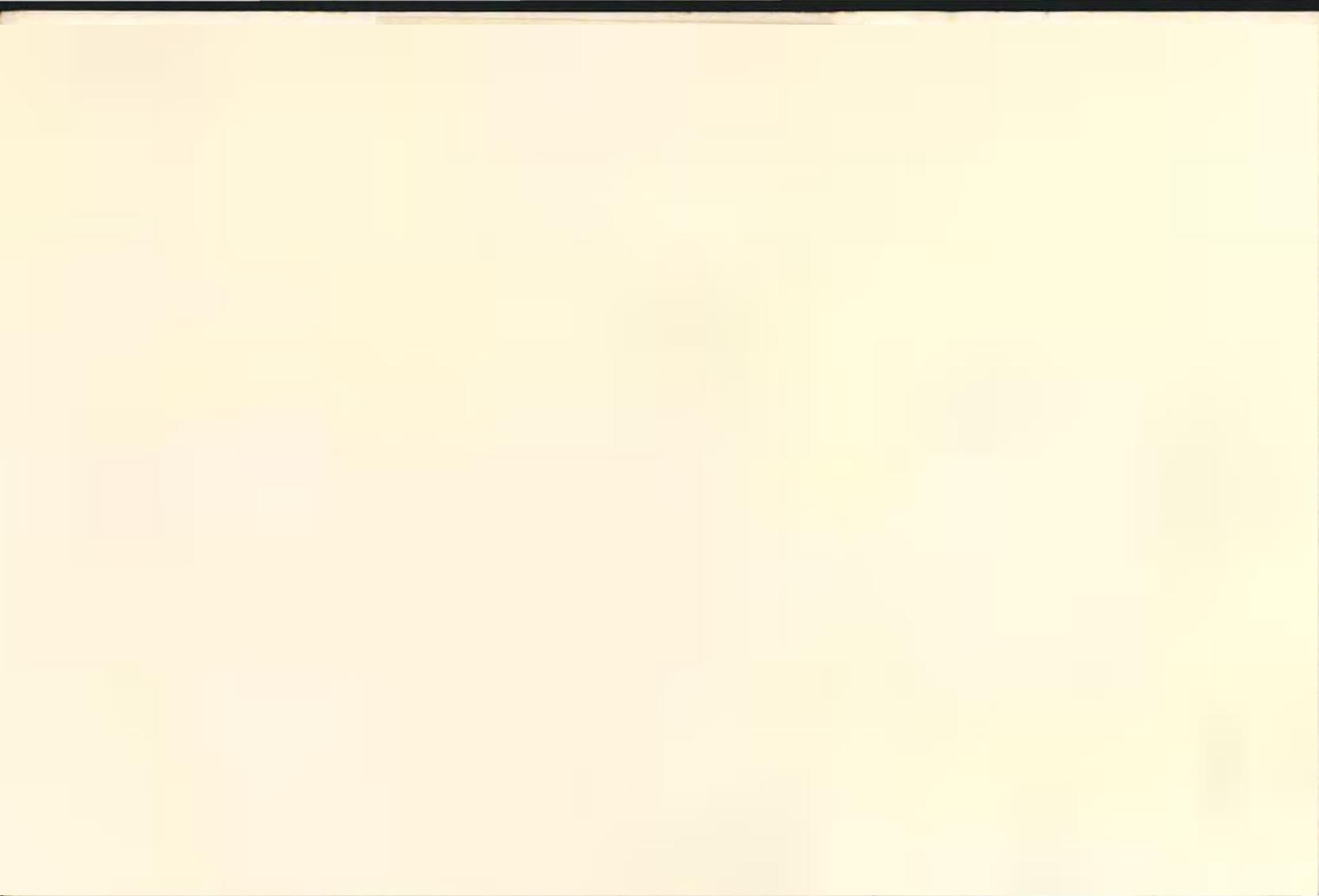


Chart 19. Ideal And Actual Number of children

A basic problem is that the ideal number of children in Taiwan is still high—3.9 children—compared to only 2.7 in Japan, for example.

In the future much more effort must be made to reach younger women and to get people to think in terms of a smaller ideal family size.

To do so there must be more effort made by all government and other agencies, particularly education and communications. Taiwan is now putting in only 5¢ per person, low compared even to Korea, which is poorer but spends at least 8¢.





Commissioner Hsu explains the population problem and family planning program in Taiwan to Mr. McNamara at the Taiwan Provincial Institute of Family Planning.

A discussion on the significance, problems, and plans of the program followed.

